Date: Mon, 10 May 93 17:28:40 PDT
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #564
To: Info-Hams

Info-Hams Digest Mon, 10 May 93 Volume 93 : Issue 564

Today's Topics:

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 10 May 93 15:42:57 CDT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!
ux1.cso.uiuc.edu!uwm.edu!linac!uchinews!raistlin!timbuk.cray.com!hemlock.cray.com!
cherry10!dadams@network.UCSD.EDU
Subject: Cellular Scanner
To: info-hams@ucsd.edu

In article sdd@mudos.ann-arbor.mi.us, mju@mudos.ann-arbor.mi.us (Marc Unangst)

writes:
|
|What I wonder, though, is whether it covers scanners that can receive
|cellphone transmissions as a result of side-effects of the receiver
|design...i.e., the old (2*IF)+freq. trick.

And what if the cell phone was broadcasting on a harmonic? But that could
never happen. ;^)

--David C. Adams Statistician Cray Research Inc. dadams@cray.com

  Old cowboys never die. They just smell that way!

Date: 10 May 93 15:37:16 CDT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!
zaphod.mps.ohio-state.edu!uwm.edu!linac!uchinews!raistlin!timbuk.cray.com!
hemlock.cray.com!cherry10!dadams@network.UCSD.EDU
Subject: Cellular Scanner
To: info-hams@ucsd.edu

In article 15078@nntpd2.cxo.dec.com, little@nuts2u.enet.dec.com (nuts2u::little)
writes:

| 3. As defined within our rules, scanning receivers, or "scanners,"
| are radio receivers that can automatically switch between four
| or more frequencies anywhere within the 30-960 MHz band. In...
|
|So many cordless phones can automatically switch between four or more
|frequencies anywhere within the 30-960 MHz band. I think the clincher is
|the word "anywhere". Switching between four frequencies in the 49 MHz is
|certainly included in swictching between four frequencies in the range
|30-960 MHz. Makes cordless phones sound like scanners based upon the above
|definition.

I dunno. I think that if a scanner can only switch between four or more
frequencies in the 31-959 MHz band that it cannot switch to frequencies
"anywhere" in the band, and hence should not be affected by the law. ;^)

At any rate one could argue that the law is ambiguous, and hence should
be thrown out by the courts. ;^)

--David C. Adams Statistician Cray Research Inc. dadams@cray.com

  Old cowboys never die. They just smell that way!

Date: 10 May 1993 23:11:44 GMT
From: usc!howland.reston.ans.net!ux1.cso.uiuc.edu!moe.ksu.ksu.edu!uafhp!
plaws@network.UCSD.EDU
Subject: Confusing letters in call signs, etc.
To: info-hams@ucsd.edu

cowan@balsam.pinetree.org (Darin Cowan) writes:

>wier@merlin.etsu.edu (Bob Wier) writes:

>> Also S/X
>>
>> as in de WB5KXH
>>
>> I think that problem is also because in English, you don't see
>> many words with X, lots with S - so people tend to "hear"
>> S instead...

>And I/Y as in VE3 OIJ. I usually have to say it phonetically or speak
>very slowly to make it understood.

I have a similiar problem, I am N5UWY. Y. Not I.

Speaking of Canada ... Can I take the test while I'm there this summer and use
my folks address on the license (or licence)????

Peter / N5UWY / V31WY / VE2???

Date: 10 May 93 13:22:10 PDT
From: ucla-mic!MVS.OAC.UCLA.EDU!CSMSCST@locus.ucla.edu
Subject: Cuba & QSLs
To: info-hams@ucsd.edu

In article <1sm1iv$nki@cville-srv.wam.umd.edu>,
ham@wam.umd.edu (Scott Richard Rosenfeld) writes:

>
>It's no secret that the US and Cuba aren't the best of friends, but
>I have met a number of Cubans on the air, who have told me to QSL

>direct. Does anybody here have any experience (good or bad) with
>getting QSL cards from Cuba?
>
>As far as return postage, what do you do? Throw in a buck?
>I think not. I guess an IRC would work, but can anyone advise?
>

I suggest finding a VE or XE who is willing to help you - the US
doesn't have direct mail service with Cuba, while both Canada and
Mexico do. Send your card to your VE/XE friend with 3 SAE's --
one to Cuba, one for the return to VE/XE, and the final one for
the return to you. Include 1 IRC for the Cuban station, and a
couple of IRCs or GS for your friend. Don't send US $ to Cuba-
I believe it is illegal for Cuban nationals to posess US currency.
There is at least one XE station willing to do this. His call
was in a recent DX Bulletin, but I don't have the reference with
me.

  -- 73 de Chris Thomas, AA6SQ (ex-WA6HTJ) (CSMSCST@MVS.OAC.UCLA.EDU)

Date: Mon, 10 May 1993 19:58:16 GMT
From: usc!zaphod.mps.ohio-state.edu!sol.ctr.columbia.edu!news.kei.com!news.oc.com!
gumaer@network.UCSD.EDU
Subject: Experience with Ramsey kits?
To: info-hams@ucsd.edu

Inus Scheepers (inus@aloe.ufh.ac.za) wrote:
> Dear Net,

> I'm looking for experiences on the Ramsey amplifier kits...
> How reliable are they (esp. the PA-10) Can they be easily
> converted to other bands (e.g. 10 m)? Are there any other
> companies that I should try?

> (I'm posting this for a friend --- Callsign: Z251)
> Will summarise if appropriate responses received.
> Thanks in advance!

Mr. Scheepers,,

     My father bought a 6m ramsey receiver kit about a month ago. To his
dissatifation he found that the resisters were not the right ones. Also, he
noticed that all the parts were not included in the box. So, needless to say
He will not buy another Ramsey.

     Has anyone else had this problem?

                    73,
                    Mark KA5YUV
                s
--

Mark Gumaer (KA5YUV) | Vice-President-Elect Radio East Texas State University
gumaer@merlin.etsu.edu| Editor Radio E.T.S.U. Newsletter
                      |Phone (903) 886-2084 (on weekdays)
                      | (903) 356-2253 (on weekends)
                      |FAX   (903) 886-2084
                      |Ham Radio 146.78 or 147.02 Mhz

AKA: Don Begal in Duelmasters, Jurine DM61
      Goomar in Adventures Guild, Antar

Date: Mon, 10 May 1993 23:20:58 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!news.ucdavis.edu!othello.ucdavis.edu!
ez006683@network.UCSD.EDU
Subject: Experience with Ramsey kits?
To: info-hams@ucsd.edu

gumaer@merlin.etsu.edu (Mark W. Gumaer) writes:
:
: Mr. Scheepers,,
:
:   My father bought a 6m ramsey receiver kit about a month ago. To his
dissatifation he found that the resisters were not the right ones. Also, he
: noticed that all the parts were not included in the box. So, needless to say
: He will not buy another Ramsey.
:
:   Has anyone else had this problem?
:
:   73,
:   Mark KA5YUV
You didn't say, did you call ramsey and try to resolve the problem with
them? I've never purchased one of their kits but would certainly try to
make a call if there was a problem. If you did call how were you treated.

Dan

--
---
* Daniel D. Todd   Packet: KC6UUD@WA6RDH.#nocal.ca.usa   *
*   Internet: DDTODD@ucdavis.edu   *

*   Snail Mail: 1750 Hanover #102   *
*   Davis CA 95616   *
--
*   I do not speak for the University of California....   *
*   and it sure as hell doesn't speak for me!!   *
--

Date: 10 May 1993 21:25:29 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!
usenet.ins.cwru.edu!news.ysu.edu!yfn.ysu.edu!ag821@network.UCSD.EDU
Subject: G5RV
To: info-hams@ucsd.edu

I have used both Zepps and G5RVs.. I find that the Zepp does
have more gain than the G5RV.. The problem I had was that the Zepp
was getting too much RF into my shack... I cut the ladder line and
spliced on some coax.. it works real good as a soughta G5RV.. it
loads on all bands and gets out fine...

I have use parallel dipoles (4 different wires tuned to 10,20,
40 and 80 and 15 loads as harmonic)... was the worst antenna
I ever had.. everytime you tune one band .. it detunes another..
it was only $50 with all the parts and doesn't need a tuner..about
the cheapest way to go if you have weeks to tune it.

We use G5RVs now for field day and do very well... last year one of
our stations put up a G5RV in about 8 minutes only up at about
30 feet, turned on the rig and worked Israel.. I grabbed the
mike and after a few calls also got through. I have made thousands
of contacts on mine...

73

Jeff,AC4HF
--
Jeff M. Gold, AC4HF
Manager, Academic Computing Support
Tennessee Technological University

Date: Mon, 10 May 1993 17:25:06 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!
darwin.sura.net!udel!news.intercon.com!psinntp!laidbak!tellab5!
jwa@network.UCSD.EDU

Subject: G5RV: How does it work and perform?
To: info-hams@ucsd.edu

>
>I know a G5RV is a multi-band dipole-like antenna but that is about
>all I know about it. I have seen other interesting discussions about
>antennas here. I'd like to see one on the G5RV. What bands does it
>cover for what lengths of wire? (obviously one could scale it) How
>does it work theoretically? How well does it work practically? Are
>there good ones and bad ones? What does it take to make a good one?
>How does it compare to a trapped dipole?
>

I'm using a G5RV (about 40 feet high) and if I switch between it and
the Mosely TA-33 I notice very little difference.   I problems with
high SWR on some bands but my Kenwood TS440 can load into it using the
automatic antenna tunner. The SWR problem, I think, is caused by the
extra length of coax that I added in order to reach the shack.

   Jack Albert   Fellow Radio Buff
                  Tele (708) 512-7854
   Tellabs, Inc.   FAX (708) 852-7346
   4951 Indiana Ave.   jwa@tellabs.com
   Lisle, IL
   60532
            Do you have a certain itch that's so private,
            you'll only discuss it with your physician?

Date: 10 May 93 19:23:02 GMT
From: uchinews!raistlin!timbuk.cray.com!walter.cray.com!baritone!
toma@rsch.wisc.edu
Subject: Ham <-> Internet email?
To: info-hams@ucsd.edu

(I hope this is a "real" newsgroup...there are no articles in it here at
our site!)

Can anyone here tell me if there is any gateway between Ham radio and
Internet email addresses?

My brother is going to be living in Africa for the next several years,
and I think there is a Ham radio in his village. Someone told him he
could use his computer to send email to another Ham operator. But could

he also send email to me here in the States?

Please forgive my TOTAL ignorance of ham radio. I'll gratefully accept
any advice or pointers to advice...

Thanks,
  - Tom A. (Note: return address above is broken; should be "toma@cray.com")

```
---------------------------------------------+------------------------------
;-) I'd rather be ____  Thomas R. Arneberg   |  Internet: toma@cray.com
:-) singing in a |____| MPP IC Design Group  |  UUCP: ...!uunet!cray!toma
:-) Barbershop  _|   _| Cray Research, Inc.  |
:-) Quartet!   (_)  (_) Chippewa Falls, Wisc.|  #include <std_disclaimer.h>
---------------------------------------------+------------------------------
```

Date: Mon, 10 May 1993 19:13:06 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!
zaphod.mps.ohio-state.edu!sdd.hp.com!hpscit.sc.hp.com!news.dtc.hp.com!srgenprp!
alanb@network.UCSD.EDU
Subject: How to layout a PCB???
To: info-hams@ucsd.edu

Jim Hollenback (jholly@capella.cup.hp.com) wrote:

: Does any one have a suggestion as to where to find info on laying
: out a pc board? Not so much as the CAD programs availiable, but
: given a schematic, how does one figure out how to put what gizmo
: where and how one goes about making the connections. Or is that
: something like UN*X - you just got to know, son.

It's more an art than a science. You start by placing all the
IC's and physically large devices. This is the most important step.
Take some time figuring out which IC's have lots of interconnections
and place them close together. On a microprocessor board, for example,
place all the memory chips so the address and data bus flow in as
straight a path as possible from CPU across the board. Don't worry too
much about the odd line or two that has to go from one side of the board
to the other -- concentrate on bus lines, since there are so many of them.

Parts with only 2 or 3 connections, like resistors, capacitors,
transistors, etc. can be placed close together. IC's need to be spaced
farther apart to leave room for the connecting traces.

Start with plenty of room between parts. If the board ends up too big,
you can move the parts closer together later. It's much easier to see
how close to put them after you have the traces hooked up.

Before you start routing traces, decide on your design rules. That is, what is the thinnest trace your PC fabrication process can handle without etching the trace down to nothing. Also what is the closest you can place traces without danger of a short. If you have your boards made by a company, they can tell you what design rules to use.

I prefer to place all pads on center, if at all possible. This means place all parts on a .1" grid, or .05" or even .025" when necessary. This makes it much easier to route traces (with most software) and easier to calculate clearance for design rule checking.

Laying out PC boards is actually pretty easy, if you have plenty of board space available. It only gets hairy if you try to mineaturize.

Some software nowdays has auto-routing capability. I have found that it works pretty well if 1) You are not trying to mineaturize,
2) You do a good job of preliminary parts placement,
3) You have no layout-critical circuits (like RF transmission lines) and
4) You are willing to go back and "clean up" manually after the computer does its job.

AL N1AL

Date: 11 May 1993 00:14:08 GMT
From: usc!elroy.jpl.nasa.gov!kilroy!gwalsh@network.UCSD.EDU
Subject: Mods for the TH-77"E" (European) ?
To: info-hams@ucsd.edu

Does anyone have modification information for the Eurpoean version of the Kenwood TH-77A? I was the author of the TH-77A version so I already have that information. Someone in Spain contacted me looking for mods for the TH-77E since the 77-A chip resistors are layed out a bit differently.

Thanks for any help!

Gerald J. Walsh - KB6OOC | Internet: gwalsh@kilroy.Jpl.Nasa.Gov
Jet Propulsion Laboratory | Packet : KB6OOC@W6VIO.#SOCA.CA.USA.NA
RF and Microwave Subsystems Section | Phone   : (818) 354-3913
M/S 238-528 | Fax   : (818) 393-0207
4800 Oak Grove Drive |
Pasadena, CA 91109 |

Date: 9 May 93 15:33:00 GMT

From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!gatech!
destroyer!cs.ubc.ca!unixg.ubc.ca!kakwa.ucs.ualberta.ca!ersys!adec23!nebulus!
freddy!dave.short@network.UCSD.EDU
Subject: PRO-2022 MODS
To: info-hams@ucsd.edu

Does anyone know of mods for the PRO-2022 Radio Shack scanner, mostly to
increase its I.F. bandwidth?

Date: 10 May 1993 22:59:23 GMT
From: gumby!destroyer!cs.ubc.ca!unixg.ubc.ca!taf@yale.arpa
Subject: Push-on RF Coaxial Connectors
To: info-hams@ucsd.edu

I would like to install my 2M mobile radio in my car in a slide in bracket as
is popular with higher priced car stereo "shuttle decks". The problem is
finding a push-on RF connector. I am planning to put a UHF to BNC female
adapter on the back of the radio. Then modifiying a BNC male connector to
slide on the BNC female. Does anyone know of any source of slide on Coax
connectors, or a better way of solving this problem?

Tom Felton VE7HAX

Date: Mon, 10 May 1993 22:40:30 GMT
From: sdd.hp.com!ux1.cso.uiuc.edu!howland.reston.ans.net!torn!csd.unb.ca!
UNBVM1.CSD.UNB.CA@network.UCSD.EDU
Subject: Radio Shack XTX mods wanted
To: info-hams@ucsd.edu

Would anyone out there have info as to how to modify a Radio Shack
XTX100 10 meter rig? Also, of course, what would the mod do?
TNX, 73, Luis Nadeau VE1LRN

Date: Mon, 10 May 1993 22:57:00 GMT
From: usc!sol.ctr.columbia.edu!news.kei.com!ub!acsu.buffalo.edu!
ubvmsd.cc.buffalo.edu!v111qheg@network.UCSD.EDU
Subject: SB-200 mod for 160m (?)
To: info-hams@ucsd.edu

Does anyone in net.land have the Heathkit mod for 160 meters in their SB-200
linear? How easy is it to add 160 and how expensive? Thanks, es 73

Peter KB2NMV

Date: Mon, 10 May 1993 21:48:45 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!
darwin.sura.net!sgiblab!a2i!davidj@network.UCSD.EDU
Subject: Stacking dipoles for gain...
To: info-hams@ucsd.edu

In <1993May10.134924@kuttner.sfc.sony.com> weaver@kuttner.sfc.sony.com (Eric
Weaver) writes:

>I have a question about power gain from "stacking" dipoles,
>particularly at 5/8 wavelength intervals.

>It's a common thing in the broadcasting biz to stack dipoles ONE
>wavelength apart, and get a power gain of N from N radiators. It
>works 'cause the FIELDS add together and you divide the POWER between
>them. Thus you wind up with N^2/N = N times the power "out there."
>This I understand okay...

Umm, maybe you don't. I think the physics guys would object to
anything that results in N times the power you put in, going
"out there". What you have in any directional antenna is taking
some power that's going over here and focusing it to go out there
instead. For a 10 dBd antenna, that just means that _in the major
lobe_ you have 10 dB more radiated field strength than you had
with one dipole. This is why you don't want to use a n=large antenna
on a tall mountain with people listening right below it; the main
lobe just zips over their head.

You can figure the directional pattern or "gain" in any azimuth
and elevation by working out how the phases of the radiated fields
add up. Same as in acoustics. Say it's a 2-bay antenna spaced one
wavelength apart and fed in phase, and you're out at the horizon.
You get a power doubling _in your direction_ because the fields
add, as you mention. But go up 30 degrees, and figure (simple trig)
the path lengths from each of the bays to your receiver. The wavefronts
from the two bays don't add anymore, they're not in phase anymore.
This applies to any number of bays, any amount of spacing, and whether
they are vertically stacked and you're looking for gain at the horizon
at the expense of skyward and shrubbery-ward, or if they're vertical
spikes in a marsh and you're looking for gain in one azimuth at the
expense of a null in another (AM directional).

I don't think 5/8 wave spacing would be useful for much. Stick to
one wavelength, if you want to make a better gain RPU antenna, look
at the ARRL antenna book thing for making a Stationmaster clone out
of RG-8 or RG-214 inside a vaulting pole.

[Aside-ask Pelzel what I knew about antennas 14 years ago and when
he stops cackling, you might call me for more on this ;-)

Cheers
DJ

--

Josephson Engineering, San Jose California   MICROPHONES
Tel/ 408-238-6062 Fax/ 408-238-6022   INSTRUMENTATION
email:david@josephson.com ftp info from: rahul.net /pub/davidj/

Date: Mon, 10 May 1993 20:49:24 GMT
From: swrinde!gatech!howland.reston.ans.net!darwin.sura.net!sgiblab!sfcsun!
weaver@network.UCSD.EDU
Subject: Stacking dipoles for gain...
To: info-hams@ucsd.edu

I have a question about power gain from "stacking" dipoles,
particularly at 5/8 wavelength intervals.

It's a common thing in the broadcasting biz to stack dipoles ONE
wavelength apart, and get a power gain of N from N radiators. It
works 'cause the FIELDS add together and you divide the POWER between
them. Thus you wind up with N^2/N = N times the power "out there."
This I understand okay...

But what about (take the simple case) a pair of dipoles at 5/8 wave
apart, fed in phase? The ARRL Antenna Book, in that page full of
azimuth patterns, shows major lobes horizontally, minor lobes (-6 dB)
vertically, and a gain of 4.8 dB, or a factor of 3! I am sadly unable
to visualize how this works.

Furthermore, how much gain can one get from stacking more dipoles at
5/8 wave? I have long wanted a nice omni horizontal gain antenna for
our RPU repeater, and if 4 bays of this would get us 10 dBd I'd gladly
take the time to build it.

[Not really an RF engineer; just found the hat]
--

Eric Weaver Sony AVTC 677 River Oaks Pkwy, MS 35 SJ CA 95134 408 944-4904
& Chief Engineer, KFJC 89.7 Foothill College, Los Altos Hills CA 94022

Date: 10 May 93 18:56:35 GMT
From: ogicse!uwm.edu!zaphod.mps.ohio-state.edu!howland.reston.ans.net!
newsserver.jvnc.net!siemens!dep@network.UCSD.EDU
Subject: Transmitter low pass filters
To: info-hams@ucsd.edu

Hi

I am new to HF and I am in the process of setting up an HF
station. During some of my tests I have experianced TVI and
I want to get a low pass filter for my rig. I have been given
a few recomendations (B&W, Bencher, and ICE). Does anybody
have any experiance with these manufactures? What is a good low pass
filter manufacturer? What specifications should I look for if I want to
operate 80 - 10 Meters with this low pass filter
in the transmission line? What should the cutoff freq. be?
What kind of antenuation should a good filter have at 50 Mhz?
what should the insertion swr be?
How much power should the filter handle assuming I want to run
the legal limit some day? What are the trad offs on these paramiters?

Please send your comments to me or post them to the net. Everything I
get will be reposted to the net in sumation.

Thanks for any help

Dave Post
WA2QIK
dep@siemens.com

End of Info-Hams Digest V93 #564
****